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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/499,060 02/04/00 GARNIER

C 98GR22045417

EXAMINER

027975 MM41/0831
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CUNNINGHAM, T
ART UNIT PAPER NUMBER

2816
DATE MAILED:

08/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/499,060

Applicant(s)

GARNIER ET AL.

Examiner

Terry D. Cunningham

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 04 February 2000 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Summary of changes in this action

The rejection in view of has been Caron has been overcome in view of Applicant's persuasive remarks.

Claim Rejections - 35 USC § 112

Claims 38 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 38 and 39 attempt to further limit a method claim by adding structural limitations. Thus, these claims are seen to be ambiguous (See M.P.E.P. § 2173.05(o) II).

Examiner has considered Applicant's remarks for the above rejection and has not found them to be persuasive. Contrary to Applicant's remarks, only the marked-up copy of the claims (which is an addendum) includes the cancellation of these claims, not the actual amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 12, 17, 18, 25, 26, 32, 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caron. In the above discussed circuit to Caron, there is no specific discussion of MOS transistors. However, it is notoriously well known that bipolar transistors and MOS

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transistors are art-recognized equivalents. Additionally, it is notoriously well known that MOS transistors have reduced leakage current. Therefore, it would have been obvious for one skilled in the art to use MOS transistors in place of the bipolar transistors of Caron due to the doctrine of equivalents and to obtain reduced leakage current.

Claims 9-40 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art Fig. 1 in view of Tanigawa. Applicant's prior art Fig. 1 discloses a ramp generator having a broad current source Ig1 with no expressed teachings of the structure thereof. The reference to Tanigawa discloses in Fig. 4 a specific current sink comprising a "current mirror" which has the advantage of gain control. It is notoriously well known that to modify a current sink circuit, as seen in Fig. 4 of Tanigawa, to a current source circuit, such requires changing the conductivity types of the transistors and the polarities of the power supply. Therefore, it would have been obvious for one skilled in the art to modify the circuit of Fig. 4 of Tanigawa to be a current source circuit as is notoriously well known in the art. Further, it would have been obvious for one skilled in the art to use the specific current source of Tanigawa, modified as discussed above, for the broad current source Ig1 of Applicant's prior art Fig. 1 for the expected advantage of obtaining a constant current with gain control.

With respect to claims 11, 12, 17, 18, 25, 26, 32, 33 and 38, it would have been obvious for one skilled in the art to use MOS transistors in place of Q1 and Q2 of Tanigawa for similar reasons as discussed above with Caron.

Examiner has considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant states that "there must be some reason in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references". However, the above rejection clearly sets forth this reason. Clear suggestion and motivation is

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provided in the above rejection, contrary to Applicant's remarks. Additionally, since the above modification yields a circuit identical in structure to the recited and disclosed by Applicant, in must inherently have the same function.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terry Cunningham whose telephone number is (703)308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (703)308-4876. The fax phone number for this Group is (703)308-7722. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

TC
August 27, 2001


Terry D. Cunningham
Primary Examiner
Art Unit 2816